

Claims

1. A device to deliver a powdery medicine for nasal cavity for spraying a powdery medicine filled in a capsule by loading a capsule between a connection port on the side of a nozzle for spraying the powdery medicine into the nasal cavity and a connection port on the side of a pump for supplying spray air to the nozzle, the capsule being formed with holes on both ends in communication with both of the connection ports and supplying spray air from the pump through the inside of the capsule to the nozzle, characterized in that a capsule holder for holding the capsule filled with the powdery medicine slidably in the longitudinal direction thereof and loading the same between the connection port on the side of the nozzle and the connection port on the side of the pump is placed moveably forward and backward relative to a loading position of the capsule, a cutter for partially cutting off both ends of the capsule that moves forward to the loading position while being held by the capsule holder to make holes on both ends thereof is placed, and a positioning guide is located on this side of the cutter for guiding both ends of the capsule that moves forward to the loading position while being held by the capsule holder and causing the capsule to slide as far as a predetermined position.

2. A device to deliver a powdery medicine for a nasal cavity according to claim 1, wherein the cutters includes a pair of blades secured in parallel with each other with the blade tips being directed to the direction opposing the advancing direction of the capsule holder, and the positioning guide includes a pair of protrusions opposed to each other and a storage space is formed between the blade and the protrusions placed on this side thereof for discharging cut ends of the capsule cut off by the blades.

3. A device to deliver a powdery medicine for a nasal cavity according to claim 1 or 2, wherein the distance between the connection port on the side of the nozzle and the connection port on the side of the pump is made shorter than the length of the capsule after cutting off the both ends by the cutters so that both ends of the capsule loaded between them are pressed by the peripheral portions of both of the connection ports.

4. A device to deliver a powdery medicine for a nasal cavity for spraying a powdery medicine filled in a capsule by loading a capsule between a connection port on the side of a nozzle for spraying the powdery medicine into the nasal cavity and a connection port on the side of a pump for

supplying spray air to the nozzle, the capsule being formed with holes on both ends in communication with both of the connection ports and supplying spray air from the pump through the inside of the capsule to the nozzle, characterized in that a capsule holder for loading the capsule filled with the powdery medicine between the connection port on the side of the nozzle and the connection port on the side of the pump is placed moveably forward and backward relative to a loading position of the capsule, a cutter for partially cutting off both ends of the capsule that moves forward to the loading position while being held by the capsule holder to make holes on both ends thereof is placed, and the distance between the connection port on the side of the nozzle and the connection port on the side of the pump is made shorter than the length of the capsule after cutting off both ends by the cutter, so that both ends of the capsule loaded between them are pressed by peripheral portions of both of the connection ports.

5. A device to deliver a powdery medicine for a nasal cavity according to claim 4, wherein the diameter for each hole formed on both ends of the capsule by the cutter is set to a size substantially identical with or larger than the diameter for the opening of each of the connection ports in communication with the hole.